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CLAIMS:

1. A method for photochemical treatment of a target site, the method comprising:
 - (a) providing a stream of liquid having a predetermined flow rate and is free-space flowing along at least one portion of its trajectory towards a contact with the target site;
 - (b) providing UV-radiation having predetermined parameters in terms of power, wavelength, duty cycle and repetition rate;
 - (c) directing said UV-radiation within said stream of liquid along a trajectory of said stream such that the liquid serves as a flowing liquid wave guide carrying the UV-radiation through the free-space flowing portion of the liquid trajectory making use of total internal reflection of the UV radiation along said portion;
 - (d) maintaining at least one free-space flowing portion of the stream, with the UV-radiation locked within in total internal reflection, in contact with said target site for a time period and under conditions sufficient for affecting photochemical disinfection sterilization decontamination or detoxification treatment of the target site.
2. The method of Claim 1, wherein the target site is an item or a substance suspected as afflicted by noxious biological or chemical species.
3. The method of Claim 1, wherein the target site is selected from pre-filled containers, filled containers, surfaces, humans, mammals, vehicles, medical instrumentation, conveyors, conveyor belts, foods, fruits, vegetables, salads.
4. The method of Claim 1, wherein said UV-radiation is generated by a laser source.
5. The method of Claim 4, wherein said laser source is a high-frequency pulsed laser.
6. The method of Claim 4 or 5, wherein said laser source is a high-intensity pulsed laser.
7. The method of any one of Claims 4 to 6, wherein said laser source is a pulsed 266nm laser.
8. The method of any one of Claims 4 to 6, wherein said laser source is a pulsed 355nm laser.

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9. The method of any one of Claim 4 to 8, wherein said laser source is a high intensity sub-microsecond pulsed laser.
10. The method of Claim 1, further comprising disinfection of the liquid on its way to the target site, by means of the UV radiation carried by the liquid.
11. The method of Claim 1, further comprising recycling the liquid by gathering it from the vicinity of the target site and returning it towards another contact with a target site.
12. The method of Claim 1, further comprising recycling the liquid by gathering it from the vicinity of the target site and returning it towards another contact with a target site, wherein the liquid is disinfected on its way to the target site by means of the UV-radiation carried by the liquid stream.
13. The method of Claim 1, comprising: coupling output from at least one UV-radiation unit to an inlet of a water projecting means and feeding the liquid stream into said water projection means under venturi pressure.
14. A device for supplying a liquid stream carrying UV-radiation to a target site, the device comprising at least one pipe-like member having (a) a liquid inlet for receiving liquid from a liquid supply means; (b) a liquid projection outlet in liquid communication with the liquid inlet; (c) a light radiation inlet positioned in an appropriate orientation relatively to the liquid outlet, for directing a beam of light into the liquid flow such that the beam of light is being guided within a free-space flowing liquid jet stream projected from the liquid projection outlet, locked within along the trajectory of the jet towards a target site;

the device is characterized by having means for performing venturi hydrodynamic - pneumatic differential pressure between the liquid path and the light inlet, thus an air suction operation is performed wherein air entering via the light radiation inlet is sucked and mixed into the flowing liquid.
15. The device of Claim 14, comprising a UV radiation source operable to generate at least one beam of UV radiation, a beam splitting assembly accommodated in the optical path of the generated UV radiation and operable to split the generated UV radiation beam into an array of UV components; an array of the pipe-like members each associated with the corresponding one of the UV components.

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